

IN THE CLAIMS

Please add/delete/amend the claims as follows:

1. A polyurethane film comprising a film prepared from a polyurethane dispersion, the dispersion being prepared from a non-ionic polyurethane prepolymer, and the prepolymer being prepared from a polyurethane prepolymer formulation including a diisocyanate and an active hydrogen containing material wherein:

the dispersion is formed in a two or more step process wherein,

- (1) in a first step the prepolymer is formed and, in a subsequent step,
- (2) an aqueous dispersion of the prepolymer is formed, in the presence of an anionic surfactant, both steps occurring in the substantial absence of an organic solvent; and

further wherein the particle size of the particulates in the dispersion is from 0.9 microns to about 0.05 microns.

2. The polyurethane film according to Claim 1, wherein the diisocyanate is either:

- (a) an aliphatic diisocyanate; or
- (b) an aromatic diisocyanate selected from the group consisting of MDI, TDI, and mixtures thereof.

3. CANCELLED.

4. CANCELLED.

5. The polyurethane film according to Claim 1 wherein the anionic surfactant is sodium dodecyl benzene sulfonate.

6. (Previously) CANCELLED.

7. The polyurethane film according to Claim 1 wherein the dispersion has a solids content of from 5 to 60 weight percent.

8. The film of Claim 1, wherein the film has a shape of a glove, a condom, an angioplasty balloon, a medical bag or a catheter.

9. A process for preparing a polyurethane film comprising the steps of:

(a) preparing a non-ionic polyurethane prepolymer;

(b) dispersing the prepolymer in water in the presence of an anionic surfactant, the particle size of the particulates in the dispersion being from 0.9 microns to about 0.05 microns; and then

(c) applying the dispersion to a substrate as a film;

wherein the prepolymer is prepared from a polyurethane prepolymer formulation including a diisocyanate and an active hydrogen containing material; and

wherein steps (a) and (b) both occur in the substantial absence of an organic solvent.

10. CANCELLED.

11. The process according to Claim 9 wherein step (c) comprises dipping, thermal coagulation, casting, electrodeposition, or a combination thereof.

12. The process of Claim 9 wherein the shape of the substrate is such that the resulting film is in the shape of a glove, condom, angioplasty balloon, medical bag, medical tubing, or catheter.

13. An aqueous polyurethane dispersion, useful for preparing polyurethane films, wherein the particle size of the particulates in the dispersion is from 0.9 to about 0.05, the aqueous polyurethane dispersion comprising the product of dispersing in water a nonionic polyurethane

prepolymer prepared from a prepolymer formulation including a diisocyanate and a mixture of diols wherein:

the dispersion is formed in a two or more step process wherein,

- (1) in a first step the prepolymer is formed and, in a subsequent step,
- (2) an aqueous dispersion of the prepolymer is formed, in the presence of an anionic surfactant,

both steps occurring in the substantial absence of an organic solvent.

14. The dispersion of Claim 13, wherein the diisocyanate is either:

- (a) an aliphatic diisocyanate; or
- (b) an aromatic diisocyanate selected from the group consisting of MDI, TDI, and mixtures thereof.

15. CANCELLED.

16. CANCELLED.

17. (Previously) CANCELLED.

18. The dispersion of Claim 13 wherein the dispersion has a solids content of from 5 to 60 weight percent.

19. A polyurethane film in the shape of a glove, a condom, an angioplasty balloon, a medical bag or a catheter, wherein the polyurethane film comprises a film prepared from a polyurethane dispersion, the dispersion being prepared from a non-ionic polyurethane prepolymer, and the prepolymer being prepared from a polyurethane prepolymer formulation including a diisocyanate and an active hydrogen containing material wherein:

the dispersion is formed in a two or more step process wherein,

- (1) in a first step the prepolymer is formed and, in a subsequent step,

- (2) an aqueous dispersion of the prepolymer is formed, in the presence of an anionic surfactant, both steps occurring in the substantial absence of an organic solvent.

20. The polyurethane film of Claim 19, wherein the particle size of the particulates in the dispersion is from 0.9 microns to about 0.05 microns.

21. (New.) A polyurethane film comprising a film prepared from a polyurethane dispersion, the dispersion being prepared from a non-ionic polyurethane prepolymer, and the prepolymer being prepared from a polyurethane prepolymer formulation including a diisocyanate and an active hydrogen containing material but not an amine chain extender, wherein:

the dispersion is formed in a two or more step process wherein,

- (1) in a first step the prepolymer is formed and, in a subsequent step,
- (2) an aqueous dispersion of the prepolymer is formed, in the presence of an anionic surfactant, both steps occurring in the substantial absence of an organic solvent.

22. (New.) The polyurethane film according to Claim 21 wherein the anionic surfactant is sodium dodecyl benzene sulfonate.

23. (New.) The polyurethane film according to Claim 21 wherein the dispersion has a solids content of from about 5 to about 60 weight percent.

24. (New.) An aqueous polyurethane dispersion, useful for preparing polyurethane films, comprising the product of dispersing in water a nonionic polyurethane prepolymer prepared from a prepolymer formulation including an MDI diisocyanate, the MDI having a P,P'-isomer content from 99 to 90 percent and a mixture of diols wherein the dispersion is formed in a two or more step process wherein:

(1) in a first step the prepolymer is formed and, in a subsequent step,
(2) an aqueous dispersion of the prepolymer is formed, in the presence of an anionic surfactant,
both steps (1) and (2) occurring in the substantial absence of an organic solvent.

25. (New.) The dispersion of Claim 24, wherein the dispersion has a solids content of from about 5 to about 60 weight percent.

26. (New.) A polyurethane film comprising a film prepared from the polyurethane dispersion of Claim 24.